

Annual Report

ON THE

SANITARY CONDITION

OF THE

RUNCORN RURAL DISTRICT,

During the Year 1920,

BY

J. S. MANSON, M.D., D.P.H.,

Medical Officer of Health.

Area of District..	..	..	..	..	49,484 Acres.
Census Population, 1911	28,216
Population, Estimated to middle of 1920	28,242

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ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

For 1920.

*To the Chairman and Members of the Runcorn Rural
District Council.*

GENTLEMEN,

I beg to submit the Annual Report for 1920, together with the Reports of the Sanitary Inspectors. The contents and the arrangement of the report have been as closely as possible in conformance with the memorandum issued by the Ministry of Health on the subject.

The death rate for the district (10·6) is the lowest on record, and this is in accordance with the general death rate for England and Wales (12·4) which is also the lowest on record.

The infantile mortality rate (53·3) is also the lowest on record; for England and Wales the figure is 80. The birth rate of 21·2 is one of the highest for recent years; for England and Wales the figure is 25·4. With so high a birth rate these low mortality rates are very satisfactory. The death rate from pulmonary tuberculosis (0·56) is also below the average for the past six years (0·66).

These figures are very curious when taken in conjunction with the undoubted overcrowding that exists owing to the shortage of houses, and also with the difficulties that have obtained in carrying out the proper scavenging of the district. The climatic conditions of 1920 were certainly favourable to healthy living. The winter was mild and the summer wet, but there must be other factors contributing to

this satisfactory result, on which it is needless to speculate here. Nor must the inference be drawn that sanitary work is of little avail; we may now be reaping where others have sown, and it is for us to maintain and better these figures if we can.

It gives me great pleasure to acknowledge the courteous help of Major G. F. Ashton, the clerk, and Messrs. Hamlyn and Wright, the public health surveyors, and of the two sanitary inspectors, Messrs. G. W. Lloyd and Arthur Cooke, whose willingness to help in this my first year of office has been fully appreciated by me.

I remain gentlemen,

Your obedient servant,

J. S. MANSON, M.D., D.P.H.

March, 1921.

1. NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

Population census 1911—28,216.

Estimated by Registrar General to middle of 1920—28,242.

The Runcorn Rural District is situated at the North Western portion of the County of Chester, bounded to the North by the river Mersey and Manchester Ship Canal, to the East by the Bucklow Rural District, to the South by the Northwich and Tarvin Rural Districts, and to the West by the Rural District of Chester. Its extent comprises 49,139 acres. The general character of the district is undulating with hills rising to about 600 feet. To the West there is an area of lowlying marsh land which extends to the southern bank of the estuary of the Mersey. The underlying rock is that of the new red sandstone which crops out conspicuously in the hill formations at Frodsham, Helsby and Weston Point. The soil is loamy.

The river Weaver flowing through the middle of the district to the N.W. drains the main part, while the remaining portion to the North is drained by the Mersey. The main line of the L. N. W. Railway to Liverpool and the North runs through the district.

The population is so distributed that about one half live under Urban conditions, while the other half live under Rural conditions.

The district itself is the most populous of all the districts in the administrative County of Chester with the exception of Crewe, Macclesfield and Hyde.

The main occupation of the inhabitants is agriculture and dairy farming, but there are many and varied industries carried out in the district. Tanneries and gas stove works in the East. In the West there are glue bone meal and patent manure works, also electric cable works and important concerns manufacturing heavy chemicals. None of these occupations seem to have any special influence on public health.

			£	s.	d.
Poor Law Relief (1920)	Frodsham District	...	1219	19	8
"	"	Budworth	737	8	2
"	"	Runcorn	127	19	0
			<hr/>		
Total			£2085	6	10

VITAL STATISTICS FOR 1920.

BIRTHS—

Total registered births	...	...	593
Births transferred 'in'	...	...	19
			<hr/>
			612
"	"	'out'	12
			<hr/>
Corrected total	...	...	<u>600</u>

Birth rate 21·2 per 1,000.

Years	...	1916	1917	1918	1919	1920
Birth rate	...	18·2	15·8	15·7	16·0	21·2

DEATHS—

Total registered deaths	...	...	297		
Deaths transferred 'in'	...	...	34		
				33 ¹	
„ „ 'out'	...	...	31		
Corrected total	...		300		
Years	...	1916	1917	1918	1919 1920
Death rate	...	13·8	11·9	15·6	12·7 10·6

INFANTILE MORTALITY.

32 deaths under 1 year of age. Legitimate 29. Illegitimate 3, giving infantile mortality rate of 53·3 for 1,000 births. For details and comparison rates see sub-joined tables.

2. SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water—The supply is from various sources. The area of Stockton Heath, Grappenhall, etc., adjoining Warrington is supplied from the deep wells of the Warrington Corporation at Winwick. Frodsham, Frodsham Lordship and Helsby have supplies from deep wells. Halton and Weston are supplied by the Runcorn Urban Council. Part of the Weston area, Norley and Sutton, Preston Brook, Dutton and Aston are supplied from the main of the Liverpool Corporation which passes through the district from Lake Vyrnwy, and Manley is provided with a public supply from Springs. The remaining portions of the district are supplied from shallow and deep wells and from brooks as at Kingsley. The need of a pure and abundant supply of water is a necessity in this district, in order that a high standard of cleanliness be maintained at the numerous dairy farms in the district. A scheme has been mooted in conjunction with other local authorities to attain this.

Water Analysis—

BUDWORTH AREA.

For chemical analysis 14 samples.

„ bacteriological analysis ... 4 „

Six samples were reported on adversely, and steps were taken to remedy the contamination.

FRODSHAM AREA.

For chemical analysis 2 samples.

Both favourably reported on.

Rivers and Streams—The prevention of pollution is aimed at as far as possible. Cesspools and dangerous effluents are kept under observation.

Drainage and Sewerage — Stockton Heath, Lower Walton and Latchford Without are sewered and drained to the Mersey by a siphon passing under the Ship Canal. Grappenhall is without proper sewerage: such sewers as there are drain into brooks. Weston Point and Halton have sewers which join those of Runcorn and drain to the Mersey. Daresbury and Moore have drainage schemes and filtration plant whose effluent flows to brooks draining to the Mersey. Frodsham and Frodsham Lordship have a joint sewerage scheme draining into the Mersey, and Helsby also has schemes with filtration plant the effluent from which flows into brooks and finally to the Mersey. Hatton also has a small filtration scheme for the Parish. The Daresbury filtration plant has been giving trouble, but repairs are being made by the Public Health Surveyors. During the year there has been an extension of the sewerage system at the Liverpool Sanatorium in the Parish of Kingswood. The remaining portion of the district is without a proper system of sewers.

Closet Accommodation—Privies and privy middens are the usual type of closet accommodation throughout the district, but in the more urban areas there is gradual conversion to water closets. This conversion which ceased during the war has made considerable progress in 1920, and there were 267 conversions at houses, 15 at Weston Point Schools, giving a total of 282 for the year.

Scavenging—There have been great difficulties in all the parishes in getting prompt and regular removal of house refuse during the year. See Sanitary Inspectors' reports. Tips such as that at Stockton Heath are not satisfactory methods of disposal of refuse owing to the accumulation of organic matter, but householders might help greatly in this by burning all vegetable and animal refuse in the house fires rather than depositing it in the dust-bins.

Schools—Antrobus, Dutton, Daresbury, Hatton and Preston-o'th'-Hill Schools were visited during the year. Antrobus and Preston-o'th'-Hill Schools were recommended for white-washing and painting. The following schools were closed for short periods during the year on account of infectious disease—

March—Dutton, on account of influenza.
 May—Helsby and Stockton Heath, measles.
 Appleton School, mumps.
 June—Halton, chicken pox.
 July—Preston-o'th'-Hill, whooping cough.
 November—Appleton, chicken pox.
 December—Preston-o'th'-Hill, chicken pox.

3. FOOD.

Milk Supply—The supervision of the sanitary conditions of the numerous dairy farms and milk shops has been carefully attended to, and on the whole these conditions have been found to be fairly satisfactory. The milk supply from one farm was stopped for 8 weeks owing to an outbreak of scarlet fever at the farm. There is still great room for improvement in the production of clean milk, and in order to interest milk producers in this reform, copies of H.M.L. 6 and H.M.L. 7 from the Ministry of Food dealing with the production and distribution of Grade A (certified) milk and Grade A milk, were sent to all the dairy farmers in the district. Only two replies were received asking for further information. This result was very disappointing and such apathy in this important matter is not creditable. Perhaps the high standards set out in the circulars, especially with regard to the testing of cattle for tuberculosis may have seemed to be utopian to the practical dairy farmer, nevertheless such standards can and are maintained in other countries—notably New Zealand.

Meat—The slaughter-houses are periodically inspected. One butcher was heavily fined for sending a portion of a tuberculosis carcase for sale.

4. INFECTIOUS DISEASES.

There has been no special out-break of acute infectious disease during the year. While scarlet fever has been less prevalent than in 1918 and 1919, diphtheria has been apparently more prevalent.

Total primary notifications	...	...	...	177
Deduct notifications of recently added diseases such as malaria, pneumonia, etc.	...	...	...	21
				<hr/> 156

Measles no longer notifiable since December 31st, 1919.

	Years	1917	1918	1919	1920
Total notifications	...	161	103	134	156
Scarlet fever notifications...			66	79	51
Diphtheria	„	...	25	42	54

Both diseases were mild in type. There were 2 deaths from scarlet fever and 4 deaths from diphtheria.

The increase in numbers of diphtheria cases need give no cause for alarm, as it seems to be chiefly due to greater use being made by practitioners of the facilities afforded by the Council for the bacteriological examinations of throat swabs. Many mild cases of sore throat were swabbed, and when the report of the bacteriological examination stated that the diphtheria bacillus was present, the case was labelled diphtheria and the usual precautions of isolation and disinfection were taken. This diagnosis of diphtheria is often a bacteriological rather than a clinical diagnosis, and it is not yet settled whether these very mild non-virulent cases should be regarded as cases of true diphtheria.

For example:—a child with a slight sore throat was taken to a doctor who sent a swab for examination. The report came back positive, and the case was notified as diphtheria. The parents refused to allow the child to go to the isolation hospital. In consequence I visited the house and found the child at home but not in the least ill, and on examination the throat seemed healthy. The danger of keeping the child at home was pointed out to the parents, and they agreed to allow the child to go to hospital if a second swab were returned as positive. This swab was taken and returned as negative. The child was kept isolated at home for another 10 days, when a third swab taken by her own doctor, was returned as negative. The house was then disinfected and the child allowed its freedom. No other cases occurred in the house.

From the practical public health point of view the knowledge and control of such cases tends to help the disease in its mild form from becoming an epidemic of virulence, for diphtheria can be an extremely fatal disease.

Enteric Fever—Two cases both recovered. Source of infection could not be traced.

Influenza—Another outbreak was expected in the Spring of 1920, and steps were taken to meet it by the acquisition of vaccine provided by the Ministry of Health. Two doctors were supplied. Arrangements were made with the Daresbury division of the British Red Cross organisation for voluntary nursing help in cases of need. Fortunately the outbreak did not occur. There were a few cases here and there and Dutton school was closed for 3 weeks. 4 cases of influenzal pneumonia were notified, and there were 6 deaths from influenza.

Measles—There was an epidemic at Stockton Heath and Helsby in May. Schools were closed.

Chicken Pox—Outbreak in June at Halton, school closed and in November and December at Appleton and Preston-o'-th'-Hill schools closed.

Small Pox—Owing to outbreaks in several parts of the country during the year, it was necessary to be on the alert for cases in the district. None occurred. There was a suspicious case seen in consultation with the doctor in charge, but the diagnosis of small pox was decided against. 4 contacts from abroad were followed up to their residences and kept under observation for a fortnight.

Whooping Cough—4 deaths.

Mumps—Outbreak in May at Appleton, school closed.

Malaria—4 cases notified, all contracted abroad.

Dysentery—1 case recovered, cause of infection unknown.

Tetanus—1 case which died, contracted by crush from infected horse's hoof.

Rabies—No cases.

Cancer, Malignant Disease—27 deaths as compared with 45 in 1919.

The subjoined tables show details of primary notifications and causes of death.

Vaccination—

VACCINATION RETURNS FOR 1919.

	Runcorn.	Budworth.	Frodsham.	Total.
No. births registered ...	86	233	131	450
Successful vaccinations	49	152	91	292
Exemptions ...	32	42	32	106
Died before vaccination	4	13	4	21
Postponed ...	—	3	3	6
Left district ...	1	6	—	7
Unaccounted for ...	—	17	1	18

These figures show that at least 36 per cent. of the infants born in 1919 were unprotected against small pox, and if the same ratio has been maintained in past years and is still continuing, there is growing up a large proportion of the population vulnerable to this dread disease. Recent outbreaks throughout the country should be a warning that the danger from small pox is not to be lightly disregarded.

Tuberculosis—There were 38 cases of pulmonary tuberculosis and 8 cases of non-pulmonary tuberculosis notified during the year. It was estimated that on December 31st, 1920, there were 132 cases of pulmonary tuberculosis and 135 cases of non-pulmonary tuberculosis in the district. This does not include cases from other districts in the Crossley and Kingswood Sanatoria.

I attended the Tuberculosis Conference at Liverpool as a delegate of the Council, and submitted a report thereon. While it may be said that the general outlook of the conference was somewhat gloomy, some relief was given by the indication of measures that were being taken for the relief of sufferers and for their after care.

More recently the theory of Calmette—the distinguished French pathologist—that the portal of entry of the tubercle bacillus is through the alimentary canal, tonsils or intestines, and reaches the lungs by a devious route, seems to place tuberculosis more among the “dirt” diseases than was formerly thought. The inhalation theory—that is the theory that the lungs are infected from the air passages—Calmette holds not to be tenable or supported by his researches.

The implication of this theory to the sanitarian is that general cleanliness, especially with regard to the handling and protection of food and drink, especially milk, from contamination by flies, dust, and unclean hands, should be as much enjoined as in such diseases as typhoid fever or summer diarrhoea. Disinfectant for tuberculosis sputum has been regularly supplied to one patient from a local chemist. It would be an advantage if each tuberculosis patient was supplied with a sputum cup and some disinfectant to be renewed from time to time either at the dispensary or by the tuberculosis nurse.

The County tuberculosis scheme is now in working order under Dr. T. H. Peyton, D.S.O., although not yet quite complete.

Facilities for the bacteriological examination of sputum at the laboratory at Chester are largely taken advantage of by the practitioners in this district. For the year there were 40 examinations, of which 27 were negative and 13 positive.

As a rule cases are promptly notified by practitioners. Disinfection after deaths from tuberculosis are promptly carried out by the sanitary staff.

There were 16 deaths from pulmonary tuberculosis and 8 deaths from non-pulmonary tuberculosis giving a death rate from this disease of 0·84.

There are two large and important sanatoria in the district, the Manchester Crossley Sanatorium and the Liverpool Kingswood Sanatorium.

The subjoined table shews the primary notifications of tuberculosis from the various parishes.

5. SANITARY ADMINISTRATION.

Staff—There are two sanitary inspectors—one for the Budworth district including Stockton Heath, Latchford Without and Grappenhall, and the other for the Frodsham district including Halton, Weston Point, Helsby.

The driver of the ambulance from the isolation hospital assists in the disinfection of premises, and disinfects bedding and clothing at the hospital.

Hospitals—The isolation hospital at Dutton has 35 beds. 84 patients were admitted during the year. 53 cases of diphtheria. 29 of scarlet fever and 2 of enteric fever.

The small pox hospital at Moore has an estimated accommodation for 10 patients although there are 20 beds. The Council have received notice to determine the tenancy of this hospital, and steps are being taken to meet the difficulty.

Bacteriological Work—Formerly this work was carried out for the Council at the York Place Laboratory, Manchester, but owing to the curtailment of postal facilities for sending swabs, the majority of the Stockton Heath practitioners requested that the Warrington Laboratory be used for this work. For some time reports were received from both laboratories, but arrangements were made with Evans' laboratory at Runcorn to examine for the whole area. This laboratory is within easy distance of all parishes and the telephone can be readily utilised for communicating the results of the examinations to practitioners.

During year 1920 examinations for diphtheria—

Manchester	86	of which	28	were positive.
Warrington	24	„	11	„ „
Runcorn	47	„	14	„ „
Total	157			

For typhoid, positive—

Manchester	4
Warrington	0
Runcorn	3
Total	7

6. HOUSING.

- (1) Estimated population 28,242.
- (2) General death rate 10.6.
- (3) Death rate from tuberculosis 0.84.
- (4) Infantile mortality 53.3.
- (5) Number of dwelling-houses of all classes 6,670.
- (6) Number of working class dwelling-houses 4,660.
- (7) Number of new working class houses erected 9.

During the year a re-survey of 54 houses distributed throughout the area but chiefly in the Frodsham district was made. These houses had closing orders put on them in the previous year 1919, but owing to the fact that alternative accommodation was not yet available for the people, the Council decided to try and induce owners to make such improvements as would allow them to suspend the closing orders until other accommodation was available. In 42 of these houses remedies were indicated as to make these houses habitable, and the Council was recommended to suspend the closing orders until other accommodation was available. Some of these improvements have been carried out and some are now in hand.

In 12 of the houses bad site or dilapidated structure compelled the confirmation of the closing orders.

New houses built in 1920	...	...	7
Stables converted into dwelling-houses		...	1
Wooden bungalow	...	...	1
<hr/>			
Total	...	...	9

There were several cases of overcrowding during the year, these were attended to, and advice given to relieve the overcrowding.

Owing to the shortage of houses—about 400 are required for the district—it is impossible to give sufficient air space in the existing accommodation which is desirable for healthy living. Notwithstanding this, it is curious that the general death rate and infantile mortality rate are the lowest on record, and the tuberculosis death rate has also fallen proportionately. For number of inspections and remedies for defects see Sanitary Inspectors' reports.

J. S. MANSON,

M.D., D.P.H.

Annual Report of the Sanitary Inspector for 1920.
Budworth District.

GENTLEMEN,

I have the honour to present for your consideration my Annual Report of Sanitary Work during the year 1920.

General inspections total 1,294; the increased figure is due to the work of improving closet and ash-place conditions and necessary inspections, supervising refuse removals in the area around Stockton Heath. This total, however, does not include numerous re-visits and inquiries on miscellaneous matters unnecessary to record.

Abatement of nuisances has been very satisfactory, only 6 cases being in hand to date. This is not so in case of Housing Acts notices where willingness is not apparent except in the case of one estate. Economic and labour difficulties, however, warrant deference to 1921 action.

The improvement in Grappenhall and Walton Inferior due to a system of refuse removals have been marked, though this work in all four parishes has demanded strict attention and much labour from your Inspector. In my opinion, direct control by the Council would prove more satisfactory with economy than the contract system, especially so in Stockton Heath where nightsoil work is at the minimum.

Efforts were again made to improve conditions regarding disposal of refuse in Great Budworth but without success; as conditions are no better other endeavours are in hand to meet the situation.

Appended is a summary of the work under the various Statutes, Orders and Regulations; also a tabular statement as required by the Cheshire County Council.

1. PUBLIC HEALTH ACTS, 1875 TO 1907.

Inspections 887. 34 statutory and 121 informal notices were served re nuisances and sanitary defects; 6 cases are in hand for 1921. The cases in hand from 1919 were cleared. In no case were legal proceedings necessary.

2. PUBLIC HEALTH (WATER) ACT, 1878.

14 chemical and 4 bacteriological samples were submitted revealing 6 unwholesome supplies—

1. Bryn Villas, Latchford Without—Town's water now laid on.
2. Bridge House, Grappenhall—second notice served ; main near.
3. Park Farm, Crowley—drains and well being improved.
4. Factory Yard, Hatton { Town's water laid on to 1
5. School Lane, „ { house, other 13 houses work
6. Farm well, Chetwode Arms, Whitley—Alternate well used. { promised for early 1921.

In case of Village Farm, Keckwick (from 1919), the drains and well have been repaired and another sample will be taken. In case of Bridge House, Grappenhall, deferred from 1919 for a bacteriological examination, improvement will be early in hand.

3. HOUSING ACTS, ETC., 1890 TO 1919.

Closing orders respecting 49 houses in this section because operative in 1920. A total of 142 inspections were made under the Housing (Inspection of District) Regulations; 32 notices with those from 1919 were served, 26 being in hand for 1921. During this year the parishes of Bartington, Dutton and Norton were covered thus completing the first inspection of whole 24 parishes in this section commencing June, 1914, less 2 years' abeyance during the war. This inspection, being from house to house and in detail, was a big undertaking but has meant great sanitary improvements in all the parishes. The first parish (Thelwall) inspected in 1914 is again being inspected; subsequent inspections, however, having to be carried out along with many other duties, will occupy many more years to cover the same area.

4. CANAL BOATS ACTS.

A total of 38 inspections of 2 "wide" and 36 "narrow" boats were carried out at the Norton, Preston Brook, and Stockton Heath Quays.

The conditions found were good generally; 4 notices were served and complied with. One case of overcrowding was remedied by the Master on instruction of Inspector for better use of cabin space. No case of infectious disease or other sickness was reported and legal proceedings were not necessary. The inmates of the boats inspected were as follow: —52 males, 29 females, 39 children.

5. DAIRIES, COWSHEDS AND MILKSHOPS ORDER.

114 Cowsheds and milkshops are registered in this section; 47 inspections were made during 1920, the conditions prevailing being satisfactory and action was not necessary.

6. FACTORIES AND WORKSHOPS ACTS.

8 Factories, 47 workshops and 1 outworkers premises on the register; 16 inspections made in 1920; 3 notices were served and complied with regarding sanitary accommodation reported by H.M. Inspector of factories.

7. PETROLEUM ACTS, ETC.

15 Petroleum stores licensed in my section, also 2 game dealers and 1 knackers yard. The two slaughter-houses have not been used this year; but, along with other places where food is prepared or sold, are kept under observation.

8. INFECTIOUS DISEASE WORK.

68 Inquiries were made respecting infectious diseases, and 65 houses (about 82 rooms) and 4 schools were disinfected by the spray or vap-lamps—formaline in each case. Over 90 lots of bedding, etc., were removed for steam disinfection to the hospital apparatus; no article was damaged and there were no claims. The reliable, conscientious, discharge of duties and help by Mr. T. Roberts, the hospital and disinfecting attendant, I greatly appreciate.

Yours obediently,

G. W. LLOYD,

14, Pike Street,
Stockton Heath,
January 28th, 1921.

R. San. I., M.S.I.A.

The Sanitary Inspector's Annual Report, 1920. Frodsham Area.

GENTLEMEN,

I have the honour to submit to you my Fourth Annual Report on the work in the sanitary department of this area.

In doing so I cannot help being filled with regret, at the small amount of real progress made in things which tend to the betterment of the people as a whole, and the district generally. I do not think this has arisen, either through indifferent, or wilful neglect on the part of anyone in authority, but owing to the fact that circumstances proved too strong a factor, against making the headway which everyone realized was becoming so pressingly urgent. Constant supervision has been given to every part of the area under my jurisdiction, and whilst it has been difficult to get nuisances abated, these difficulties have been overcome without the necessity of legal proceedings.

Evidences of the work of this department may be gathered from the tabulated statement appended herewith.

1. HOUSING INSPECTION.

In addition to a continuation of the housing inspections under the Housing, etc., Acts. Revisits have been made periodically on houses inspected during 1919. Many houses have had defects remedied, and progress is being made (slowly) towards remedying many others (see table vii.)

2. THE REMOVAL OF REFUSE.

In my 1919 report, I suggested that the time had arrived when the parish of Halton should undertake the removal of refuse from the whole of the parish, and I am pleased to report that the Committee for the parish decided in February last, 1920, to undertake the work, with the results that, in my opinion, the parish is now in a better sanitary condition than it has been for some time past.

If I were asked what is the most important feature in sanitary science, I should say "the foundation of all sanitary science is good scavenging." Your sewers and your drains are secondary considerations if scavenging is neglected, and it is with such a theory in mind, that I endeavoured to mature the scavenging arrangements and make them more perfect. Great difficulties have been met. Dilatory methods of contractors, has caused constant attention to be given to the visiting of premises in the various parishes in order to check the work of the contractors, careless handling of refuse and inaccurate returns are common complaints, and until the time when cheques are due, then, the Inspector is at fault if he certifies accounts according to his own findings, and unless he visits weekly, I maintain he will be befogged at the end of the quarter. Therefore, I have a decided opinion, that unless a better standard of contractor is secured, the work of scavenging will need to be carried out by the Council by direct labour. For further particulars see table v.

3. DAIRIES, COWSHEDS AND MILKSHOPS ORDERS.

There are 120 on the register in my area. See tables for visits.

4. FACTORY AND WORKSHOPS ACTS.

There are 30 on register. See tables.

5. PETROLEUM ACTS. STORAGE LICENCES.

There are 14 licence holders on the register.

8. SLAUGHTER-HOUSES.

There are five licensed, and six registered slaughter-houses in the Frodsham area. During the past year a carcase was seized from premises attached to a slaughter-house and proceedings taken against the owner. For visits see tables.

The following Statistics will give you an outline of the routine of the department:—

TABLE I.

No. of inspections and visits paid to various premises:—

No. of inspections of slaughter-houses	...	...	35
„ „ workshops	...	...	29
„ „ bakehouses	...	...	18
„ „ dwelling-houses and their apper- tenances	...	...	239
Visits paid to dairies, cowsheds and milkshops	...	...	106
Zymotic enquiries and revisits	...	...	106
Revisits to premises during abatement of nuisances	...	...	1319
Total	...	...	1852

TABLE II.

Nuisances, notices, reports, letters, &c.:—

No. of nuisances left over from 1919	...	...	21
„ „ found during 1920	...	...	190
„ „ abated	...	...	192
„ „ in contractor's hands (Dec., 1920)	...	...	10
„ „ referred to Public Health Surveyor	...	...	5
„ „ left to 1921	...	...	4
„ informal notices issued	...	...	81
„ statutory „ „	...	...	18
„ reports written during the year	...	...	101
„ letters „ „	...	...	391
„ interviews held with owners, agents, and other persons responsible for defects	...	...	234

TABLE III.

Headings under which defects were found to exist:—

Cesspools	...	...	...	...	5
House drainage	...	...	...	...	56
Offensive accumulations	...	...	...	...	2
Water closets	...	...	...	...	24
Eaves and fall spouts	...	...	...	...	12
Privy middens, earth and pail closets	...	...	...	...	37
Yard surfaces	...	...	...	...	15
Miscellaneous	...	...	...	...	39

TABLE IV.

Disinfection of premises and removal of bedding and other articles to the Isolation hospital for disinfection:—

No. of dwelling-house rooms disinfected	...	...	92
„ school class rooms disinfected	...	..	15
„ gallons of formalin used	..	...	9
„ beds removed from dwellings	...	...	40
„ other articles removed from dwellings	...	...	320
Zymotic enquiries (chicken pox 12)	...	...	72
Revisits	...	...	34

TABLE V.

Dust and refuse removal in the undermentioned parishes:—

<i>Frodsham</i> —No. of pails emptied	...	...	1059
„ ash-bins emptied	..	...	11852
„ dry ash-places emptied	...	...	101
„ earth closets	„	...	453
„ loads removed	...	...	1046
<i>Frodsham Lordship</i> —No. of pails emptied	...	...	559
„ ash-bins emptied	..	...	3897
„ dry ash-places emptied	...	...	131
„ earth closets	„	...	85
„ loads removed	..	...	549
<i>Halton (9 months)</i> —No. of pails emptied	..	...	569
„ ash-bins emptied	...	...	5662
„ earth closets emptied	...	...	154
„ loads removed	..	...	489
<i>Helsby</i> —No. of ash-bins emptied	...	..	3221
„ dry ash-places emptied	.	...	306
„ earth closets	„	...	123
„ loads removed	...	...	665

Weston—No. of pails emptied	..	...	...	672
„ ash-bins emptied	...	...	...	8811
„ dry ash-places emptied	...	...	...	515
„ earth closets	„	...	...	85
„ loads removed	...	...	...	841

No. of premises visited during the supervision of Contractor's work :—

PARISH.					NO. OF VISITS.
Frodsham	...	...	...	...	4513
Frodsham Lordship	...	...	...	...	2366
Halton	...	..	...	...	1177
Helsby	...	...	...	...	1266
Weston	...	...	...	...	2859
Total					12181

TABLE VI.

Distances travelled and mode of travelling :—

No. of miles on motor cycle (March to December)	...	...	...	2808
„ „ ordinary cycle	...	...	...	696
„ „ ambulance or van	...	..	...	803
„ „ train or bus	...	..	...	150
Total (exclusive of walking)				4457

TABLE VII.

Housing and Town Planning, &c., Acts, 1909—1919 :—

No. of houses inspected during 1920	...	...	...	161
„ „ where defects exist	...	...	...	140
Revisits on houses inspected during 1919	...	...	...	805
No. of houses where defects have been found to be remedied	...	...	...	45

Tabulated statement shewing nature of defects found during
inspection of houses in 1920:—

Defective windows	...	...	...	94
„ eaves and fall spouts	...	...	...	19
„ yard surfaces	...	...	...	44
„ drainage	...	...	...	8
„ broken and unlevel floors		...	...	47
„ slopsinks and waste pipes		...	...	21
„ dampness in walls, floors and roofs			...	64
„ treads and risers in stairs		...	...	4
„ closets and ashpits	...	...	...	34
„ plaster on walls (perished)		...	...	88
Houses without handrails in stairs		...	...	72
Total				495

Yours faithfully,

ARTHUR COOKE, M.S.I.A.,

Sanitary Inspector.

25/1/21.

1920.

INFANTILE MORTALITY.

CAUSE OF DEATH.	Total under 1 Year.									
	Under 1 Week	1 to 2 Weeks	2 to 3 Weeks	3 to 4 Weeks	Total under 1 Month	1 to 3 Months	3 to 6 Months	6 to 9 Months	9 to 12 Months	Total under 1 Year.
Whooping Cough ..	—	—	—	—	—	1	1	1	1	4
Enteritis ..	—	—	—	—	—	—	1	—	—	1
Premature Birth ..	4	5	1	—	10	—	—	—	—	10
Debility ..	1	—	1	—	2	—	1	—	—	3
Injury at Birth ..	2	—	—	—	2	—	—	—	—	2
Convulsions ..	—	—	—	—	—	—	2	—	—	2
Gastritis ..	—	—	—	—	—	—	—	—	1	1
Bronchitis ..	—	—	—	—	—	3	—	—	—	3
Pneumonia ..	—	—	—	1	1	1	—	—	—	2
Suffocation, over-lying ..	—	—	—	—	—	1	—	—	—	1
Other Causes.. ..	1	1	—	—	2	—	—	1	—	3
	8	6	2	1	17	6	5	2	2	32

UTILITARIAN EUTIMIANI

1	1. The first principle of Utilitarianism is that the greatest happiness for the greatest number is the foundation of morality.	1. The first principle of Utilitarianism is that the greatest happiness for the greatest number is the foundation of morality.
2	2. The second principle is that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness.	2. The second principle is that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness.
3	3. The third principle is that happiness consists in pleasure, and pain is the opposite of happiness.	3. The third principle is that happiness consists in pleasure, and pain is the opposite of happiness.
4	4. The fourth principle is that the happiness of each individual is of equal importance, and no one's happiness is more important than another's.	4. The fourth principle is that the happiness of each individual is of equal importance, and no one's happiness is more important than another's.
5	5. The fifth principle is that the happiness of the community is the sum of the happiness of its members.	5. The fifth principle is that the happiness of the community is the sum of the happiness of its members.
6	6. The sixth principle is that the happiness of the community is the end of all moral action.	6. The sixth principle is that the happiness of the community is the end of all moral action.
7	7. The seventh principle is that the happiness of the community is the measure of the rightness of all actions.	7. The seventh principle is that the happiness of the community is the measure of the rightness of all actions.
8	8. The eighth principle is that the happiness of the community is the standard by which all actions should be judged.	8. The eighth principle is that the happiness of the community is the standard by which all actions should be judged.
9	9. The ninth principle is that the happiness of the community is the basis of all moral theory.	9. The ninth principle is that the happiness of the community is the basis of all moral theory.
10	10. The tenth principle is that the happiness of the community is the foundation of all moral practice.	10. The tenth principle is that the happiness of the community is the foundation of all moral practice.

The first principle of Utilitarianism is that the greatest happiness for the greatest number is the foundation of morality. The second principle is that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. The third principle is that happiness consists in pleasure, and pain is the opposite of happiness. The fourth principle is that the happiness of each individual is of equal importance, and no one's happiness is more important than another's. The fifth principle is that the happiness of the community is the sum of the happiness of its members. The sixth principle is that the happiness of the community is the end of all moral action. The seventh principle is that the happiness of the community is the measure of the rightness of all actions. The eighth principle is that the happiness of the community is the standard by which all actions should be judged. The ninth principle is that the happiness of the community is the basis of all moral theory. The tenth principle is that the happiness of the community is the foundation of all moral practice.

1920.

NOTIFICATIONS—INFECTIOUS DISEASES.

PARISH.	Scarlet Fever	Diphtheria	Acute Pneumonia	Influenzal Pneumonia	Erysipelas	Enteric	Malaria	Ophthalmia	Puerperal Septicæmia	Dysentery	Tuberculosis.		Total
											Pulmonary	Non-Pulmonary	
Sutton ..	4	—	—	—	—	—	—	—	—	—	2	—	6
Walton Inferior ..	—	4	—	—	—	—	—	—	—	—	1	1	6
Halton ..	7	1	1	—	1	—	1	1	—	—	2	—	14
Stockton Heath ..	9	16	3	2	1	—	1	—	1	—	10	4	47
Frodsham ..	3	4	—	—	—	1	—	—	—	—	6	—	13
Frodsham Lordship ..	1	1	—	—	—	—	—	—	—	—	1	—	3
.. „ (Overton Hospital)	—	—	—	—	—	—	—	—	—	—	6	—	6
Alvanley ..	3	—	—	—	—	—	—	—	—	1	1	2	7
Moore ..	3	—	—	—	—	—	—	—	—	—	—	—	3
Helsby ..	2	5	—	1	1	1	1	—	—	—	2	1	14
Weston ..	3	—	—	—	—	—	—	—	—	—	1	—	4
Antrobus ..	9	—	—	1	—	—	—	—	—	—	—	—	10
Aston ..	1	1	—	—	—	—	—	—	—	—	—	—	2
Grappenhall ..	—	4	—	—	—	—	1	—	—	—	1	—	6
Newton-by-Frodsham ..	1	—	—	—	—	—	—	—	—	—	1	—	2
Newton-by-Daresbury ..	—	1	—	—	—	1	—	—	—	—	—	—	1
Norley ..	1	1	—	—	—	—	—	—	—	—	1	—	3
Whitley Superior ..	—	—	1	—	—	—	—	—	—	—	1	—	2
Whitley Inferior ..	2	1	—	—	—	—	—	—	—	—	—	—	3
Manley ...	—	—	—	—	—	—	—	2	—	—	—	—	2
Latchford Without ..	1	3	1	—	—	—	—	—	—	—	—	—	5
Great Budworth ..	—	—	2	—	—	—	—	—	—	—	—	—	2
Kingswood ...	1	—	—	—	—	—	—	—	—	—	1	—	2
Kingsley ..	1	2	—	—	—	—	—	—	—	—	2	—	5
Appleton ..	—	2	1	—	—	—	—	—	—	—	—	—	3
Hatton ..	—	2	—	—	—	—	—	—	—	—	—	—	2
Acton Grange..	—	2	—	—	—	—	—	—	—	—	—	—	2
Daresbury ..	—	1	—	—	—	—	—	—	—	—	—	—	1
TOTALS ..	51	53	9	4	3	2	4	3	1	1	38	8	177

NOTIFICATIONS INFECTIONS DISEASES

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1920.

SUMMARY OF PRIMARY NOTIFICATIONS OF TUBERCULOSIS.

PARISH.	Pulmonary.	Non-Pulmonary	TOTAL.
Alvanley	1	2	3
Frodsham	5	—	5
Frodsham Lordship	1	—	1
„ „ (Overton Hospital)	6	—	6
Helsby	2	1	3
Kingsley	2	—	2
Kingswood	1	—	1
Norley	1	—	1
Hatton	2	—	2
Sutton	2	—	2
Weston	1	—	1
Grappenhall	1	—	1
Stockton Heath	10	4	14
Walton Inferior	1	1	2
Whitley Superior	1	—	1
Newton-by-Frodsham	1	—	1
	38	8	46

STANDARD ALPHABETIC INDEX TO THE RECORDS OF THE HOUSE OF REPRESENTATIVES

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29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

1920.

BIRTH-RATE, DEATH-RATE & ANALYSIS OF MORTALITY.

(Provisional figures. Provisional populations estimated to the middle of 1920 have been used for the purposes of this Table. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns).

	BIRTH-RATE PER 1,000 TOTAL POPULA- TION	ANNUAL DEATH-RATE PER 1,000 POPULATION.									RATE PER 1,000 BIRTHS		PERCENTAGE OF TOTAL DEATHS			
		All Causes.	Enteric Fever.	Small-pox	Measles	Scarlet Fever	Whooping- cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under 2 years)	Total Deaths under 1 Year	Deaths in Public Institutions	Certified Causes of Death	Inquest Cases	Uncertified Causes of Death
England and Wales	25·4	12·4	0·01	0·00	0·19	0·04	0·11	0·15	0·28	0·48	8·3	80	24·3	92·2	6·6	1·2
96 Great Towns, including London (Census Populations exceeding 50,000).	26·2	12·5	0·01	0·00	0·22	0·04	0·14	0·16	0·31	0·43	10·4	85	31·3	92·2	7·1	0·7
148 Smaller Towns (Census Populations 20,000—50,000).	24·9	11·3	0·02	0·00	0·19	0·03	0·10	0·14	0·27	0·38	7·8	80	16·5	93·2	5·3	1·5
London	26·5	12·4	0·01	0·00	0·22	0·05	0·17	0·22	0·30	0·47	9·5	75	46·8	91·2	8·6	0·2
Runcorn Rural District	21·2	10·6	0·00	0·00	0·03	0·07	0·14	0·14	0·21	0·35	0·03	53	15·6	93·4	4·0	2·6

ТАР-НТАВО :ЭТАР-НТЯВ